

A former BYU linebacker suffering from CTE thought a mission in Boston would help his mood. Here's how it did more than that

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Larry and Laurie Carr.

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SALT LAKE CITY — Dr. Robert Stern, one of the world's foremost scholars on chronic traumatic encephalopathy, or CTE, the brain condition connected to repeated blows to the head, sat in his office at Boston University across from former football player Larry Carr and asked him a question.

"How often do you think about suicide?"

As Carr's wife, Laurie, looked on, he answered painfully and truthfully.

"Every day," he said. "I think about it every day."

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The Carrs had their name tags on — Sister Laurie Carr and Elder Larry Carr, 60-something senior missionaries for The Church of Jesus Christ of Latter-day Saints. They had been sent to Boston in October 2016, about a year before the meeting with Dr. Stern. They had six months to go.

Six months too many.

The hope was that the mission would elevate Larry's mood — via the magic of service — but as time wore on he only became more agitated, more paranoid, more angry. In the little apartment they shared, tensions were suffocating.

It was nothing Laurie hadn't seen before. When Larry was in his 40s she first began to notice "something weird was going on with him." His temper grew shorter, he felt people were out to get him, sometimes he talked in gibberish. Things deteriorated to the point that Larry retired from teaching school earlier than planned, at age 62. A couple of years later, when Laurie retired, the stage was set for their mission.

They were high school sweethearts in California. When he moved to Utah to play football for BYU, she followed him. Their relationship flourished, as did Larry's football career. (To this day, 45 years later, he holds the school record for most tackles-per-game in a career.) They were married in 1972.

Through the years, as Larry's mental condition worsened and the world's awareness of CTE grew, it became obvious to the Carrs that the two were connected. All those tackles with his head took their toll. Now they were taking an awful toll in Boston.

In desperation, one night in the little apartment Larry pulled out his tablet and sent an email to noted CTE scholar Dr. Ann McKee, a colleague of Dr. Stern's at Boston University. Carr knew that the university was the epicenter of CTE research, the fount of all knowledge on the subject. He asked her if she would meet with him. It was the coldest of calls to the busiest of doctors.

But she emailed back and said yes.

Dr. McKee and her colleagues, Dr. Robert Cantu and Dr. Stern, all listened to Larry with compassion and sympathy. But as researchers there wasn't much they could do for him. "I don't see live football players," Dr. McKee explained, "I see them after they pass away."

She did, however, have an idea. A doctor named Margaret Naeser at the Boston V.A. hospital was doing studies on treating brain trauma with infrared light. Her subjects were soldiers suffering from post-traumatic stress disorder, but she might also be interested in testing a football player.

The next morning, Larry was at Dr. Naeser's door, pleading. She agreed to add him to her study. For the next six weeks he reported to the V.A. alongside returning vets from Afghanistan and Iraq. The treatment was painless. In a process called photobiomodulation, each subject was hooked up to a machine that sent what is called "near infrared light" to various parts of the brain.

"By the second week, I knew things were changing. He was calmer, we had stopped bickering over silly things," says Laurie.

"By the sixth week I was like, 'What is going on!'"

Then came the best evidence of all that the treatments were making a difference: the study required Larry to take the next eight weeks off.

"All the symptoms returned," says Laurie.

Even before the eight weeks were up, Larry received the OK from Dr. Naeser to hook back up to the light machine.

Just as before, his peace of mind returned.

An MRI had scanned Larry's brain before and after his treatments. In the before photos, dark spots abound, indicating a lack of brain activity. In the after photos there are brighter colors and lightness.

The day before their mission ended in March 2018, Dr. Naeser delivered all the documentation to the Carrs. In the year since, as Larry has continued to conscientiously take his treatments three times a week — he uses a home photobiomodulation machine he purchased from a Canadian company, vielight.com — she has presented his results at four scientific conferences, most recently just two weeks ago at the 13th World Congress on Brain Injuries in Toronto.

Meanwhile, the Carrs have been busy embracing their newfound normalcy.

“I have the person I married back again,” exults Laurie. “It’s been a miracle in our life for sure.”

Larry likes to enumerate everything that “just happened” in Boston.

“It just happened that we were sent to the place that is the center of CTE research. It just happened that Dr. McKee, the busiest woman in the world, answered my email. It just happened that she knew about the study at the V.A., which just happened to be the only V.A. hospital in the world using near infrared light treatments. ...”

“My marriage and my life have been saved, all because we were called to serve in Boston.”

Now it's Larry's desire to be a missionary for photobiomodulation therapy.

"It's groundbreaking, there's no other word to describe it," he says. "It just seems to reset the brain. The only side effect is I'm stronger and in better shape than I've ever been."

As it applies to the sport he loves, Larry is spreading the word and documenting what he has been through in his blog, footballandthebrain.com. It's his belief "that every football player who played or is playing should be using this."

It could save football, he says. It saved him.